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NOTICE OF ALLOWANCE AND FEE(S) DUE

25944 7590 08/20/2008

OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850 EXAMINER
PIPALA, EDWARD J

PAPER NUMBER

ART UNIT

DATE MAILED: 08/20/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,464	12/12/2003	Akira Hattori	118042	8812

TITLE OF INVENTION: CURVE'S RADIUS ESTIMATION DEVICE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	11/20/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

appropriate. All further indicated unless correcte maintenance fee notifical	correspondence includired below or directed oth	or transmitting the 1880 ig the Patent, advance of nerwise in Block 1, by (a	rders and notification of r a) specifying a new corres	naintenance fees wi pondence address;	II be r and/or	nailed to the current (b) indicating a sepa	correspondence address as rate "FEE ADDRESS" for
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OLIFF & BER P.O. BOX 32085 ALEXANDRIA		/2008		Conti	ificato	of Mailing or Trans	
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							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/733,464 TITLE OF INVENTION	12/12/2003 : CURVE'S RADIUS ES	STIMATION DEVICE	Akira Hattori			118042	8812
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nonprovisional	NO	\$1440	\$300	\$0		\$1740	11/20/2008
EXAM	INER	ART UNIT	CLASS-SUBCLASS				
PIPALA, E	DWARD J	3663	701-041000				
"Fee Address" ind. PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach ND RESIDENCE DATZ ess an assignee is ident h in 37 CFR 3.11. Comp	nge of Correspondence Indication form ed. Use of a Customer A TO BE PRINTED ON 2	2. For printing on the p (I) the names of up to or agents OR, alternative (2) the name of a single registered attorney or a 2 registered patent atto listed, no name will be THE PATENT (print or tyg data will appear on the p T a substitute for filing an (B) RESIDENCE: (CITY	3 registered patent vely, e firm (having as a signit) and the name meys or agents. If n printed.	membe s of up o name	er a 2	ocument has been filed for
Please check the appropr	iate assignee category or	categories (will not be pr	inted on the patent):	Individual 🚨 Cor	poratio	on or other private gro	up entity 🚨 Government
4a. The following fee(s): Issue Fee Publication Fee (N Advance Order - 4	o small entity discount p		o. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo	d. Form PTO-2038	is attac	ched.	shown above) ficiency, or credit any n extra copy of this form).
	s SMALL ENTITY state	is. See 37 CFR 1.27.	☐ b. Applicant is no lon				
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepted tes Patent and Trademark	d from anyone other than t Office.	he applicant; a regis	tered a	ttorney or agent; or th	e assignee or other party in
Authorized Signature				Date			
Typed or printed name	e			Registration No	э		
This collection of inform an application. Confident submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C tiality is governed by 35 I application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the O NOT SEND FEES OR (on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO	etain a benefit by th imated to take 12 m idual case. Any cor r, U.S. Patent and T O THIS ADDRESS.	e publi inutes nments fradem SENE	c which is to file (and to complete, including on the amount of ting ark Office, U.S. Depo O TO: Commissioner	by the USPTO to process) g gathering, preparing, and ne you require to complete utment of Commerce, P.O. for Patents, P.O. Box 1450,

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10/733,464	12/12/2003	Akira Hattori	118042	8812		
25944 75	90 08/20/2008	EXAMINER				
OLIFF & BERRIIGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850			PIPALA, EDWARD J			
			ART UNIT PAPER NUMI			
			3663			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 225 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 225 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/733,464 HATTORI ET AL. Notice of Allowability Examiner Art Unit EDWARD PIPALA 3663 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to the RCE of 6/3/08 and IDS filed 7/10/08. The allowed claim(s) is/are 1,3-6,16 and 18. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some* c) ☐ None of the: a) 🔯 All 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. ☐ Examiner's Amendment/Comment Paper No./Mail Date 6/3/08 8. X Examiner's Statement of Reasons for Allowance 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

Other .

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 This reasons for allowance is in response to the RCE filed 6/3/08 and the IDS statements filed 6/3/08 and 7/10/08, where Applicant's initialed form PTO-1449 accompanies this response.

REASONS FOR ALLOWANCE

- 2. The following is an examiner's statement of reasons for allowance: the prior art of record does not teach or make obvious the amended claims of 12/20/06 in which a curve's radius estimation device for estimating the radius of a curve upon which the vehicle is running comprises a vehicle speed sensor, a vehicle yaw rate sensor, a sensor for detecting the steering angle of a wheel handled by a driver, an estimator for estimating the curve's radius on the basis of actual vehicle speed, actual yaw rate and actual steering angle, where a base value is first estimated on the basis of vehicle speed and yaw rate (but not steering angle), and then the estimation base value is corrected on the basis of the steering angle quantity so as to determine the radius of a road upon which the vehicle is traveling.
- 3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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 Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDWARD PIPALA whose telephone number is (571)272-1360. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ejp

/Jack W. Keith/ Supervisory Patent Examiner, Art Unit 3663